UNITED STATES PATENT AND TRADEMARK OFFICE

Examiner: *Group:* *Attorney Docket #.:* 1764

In re:

Applicant(s): KREUZER, H., et al

Serial No.: 09/937,167

Filed:

RENEWED PETITION TO REVIVE UNDER 37 CFR 1.137(B)

January 21, 2008

Honorable Commissioner of
Patents and Trademarks
Washington, D.C. 20231

Attention: Mail Stop Petition

Reference is made to the Decision on Petition dated January 11, 2008.

It appears that applicant inadvertently did not sign the Responsive Amendment.

An executed copy of the Responsive Amendment is now attached hereto.

This error is regretted.

Revival of the subject application is now respectfully requested.

Respectfully submitted,

Michael J. Striker
Attorney for Applicant
Reg. No.: 27233
103 East Neck Road
Huntington, New York 11743

UNITED STATES PATENT AND TRADEMARK OFFICE

Examiner: Paul D. Kim *Art Unit:* 3729

In re:

Applicant: Helmut KREUZER

Serial No.: 10/937,167

Filed: January 8, 2002

AMENDMENT

March 28, 2007

Commissioner for Patents
P. O. Box 1450
Alexandria, Virginia

Sir:

Responsive to the Office Action of August 18, 2006, please amend the application as follows:

In the claims:

1. (currently amended) A method for producing a magnetically excitable core (24) having a core winding (40) for an electrical machine, by which in a method step (S1), the core (24), having a substantially parallelepipiped shape (20) with slots (32) extending parallel on one side, is furnished, into whose slots (32), in a method step (S2), the core winding (40) is inserted by winding sides (36), and then in a method step (S3), the core (24) together with the core winding (40) is reshaped into a cylindrical ring shape with radially inward-oriented slots (32), characterized in that in each case all the winding sides (36) that are inserted into each slot (32) are pressed together into a slot shape (119) in a tool (44) and together plastically reshaped before being inserted into the slot (32) to permanently assume the slot shape (119), and that the winding sides (36) of the core winding (40) are pressed into the slot shape (119), which corresponds to a cross-sectional shape of the slots (32) of the core (24).

2. (Previously presented) The method of claim 1, characterized in that the core (22) is fabricated in such a way that on each of core ends (61) to be joined together, there is one half-tooth (88) each in the circumferential direction.

Claim 3 cancelled.

4. (Previously presented) A method for producing a magnetically excitable core (24) having a core winding (40) for an electrical machine, by which in a method step (S1), the core (24), having a substantially parallelepipiped shape (20) with slots (32) extending parallel on one side, is furnished, into whose slots (32), in a method step (S2), the core winding (40) is inserted by winding sides (36), and then in a method step (S3), the core (24) together with the core winding (40) is reshaped into a cylindrical ring shape with radially inward-oriented slots (32), wherein in each case all the winding sides (36) that are inserted into each slot (32) are pressed into a slot shape (119) in a tool (44) and reshaped before being inserted into the slot (32), characterized in that the winding sides (36) of the core winding (40) are pressed into the slot shape (119), which corresponds to a cross- sectional shape of the slots (32) of the core (24), minus at least a fraction of a thickness (d_{ISO}) of an insulating layer (123).

5. (Previously presented) A method for producing a magnetically excitable core (24) having a core winding (40) for an electrical machine, by which in a method step (S1), the core (24), having a

substantially parallelepipiped shape (20) with slots (32) extending parallel on one side, is furnished, into whose slots (32), in a method step (S2), the core winding (40) is inserted by winding sides (36), and then in a method step (S3), the core (24) together with the core winding (40) is reshaped into a cylindrical ring shape with radially inward-oriented slots (32), wherein in each case all the winding sides (36) that are inserted into each slot (32) are pressed into a slot shape (119) in a tool (44) and reshaped before being inserted into the slot (32), characterized in that the core winding (40) is wound with at least one winding overhang (115).

6. (Previously presented) The method of claim 5, characterized in that a spacing (d2) of one winding side (36) from an adjacent, winding side (36) is wound larger than a spacing (d1) between two slots (32).

7. (Original) The method of claim 6, characterized in that by the pressing of the winding sides (36) into the slot shape (119), the at least one overhanging winding side (36) is permanently lifted out of a plane formed by the non-overhanging winding sides (36).

8. (Previously presented) A method for producing a magnetically excitable core (24) having a core winding (40) for an

electrical machine, by which in a method step (S1), the core (24), having a substantially parallelepipiped shape (20) with slots (32) extending parallel on one side, is furnished, into whose slots (32), in a method step (S2), the core winding (40) is inserted by winding sides (36), and then in a method step (S3), the core (24) together with the core winding (40) is reshaped into a cylindrical ring shape with radially inward-oriented slots (32), wherein in each case all the winding sides (36) that are inserted into each slot (32) are pressed into a slot shape (119) in a tool (44) and reshaped before being inserted into the slot (32), characterized in that the core winding (40) is embodied as a two-layer loop winding.

9. (Previously presented) A method for producing a magnetically excitable core (24) having a core winding (40) for an electrical machine, by which in a method step (S1), the core (24), having a substantially parallelepipiped shape (20) with slots (32) extending parallel on one side, is furnished, into whose slots (32), in a method step (S2), the core winding (40) is inserted by winding sides (36), and then in a method step (S3), the core (24) together with the core winding (40) is reshaped into a cylindrical ring shape with radially inward-oriented slots (32), wherein in each case all the winding sides (36) that are inserted into each slot (32) are pressed into a slot shape (119) in a tool (44) and reshaped before being inserted into the slot (32), characterized in that the core (24),

before the core winding (40) is inserted into the slots (32), is bent over a core spine (89) in such a way that slot openings (72) for insertion of the winding sides (36) are widened.

10. (Withdrawn) The method of claim 1, characterized in that the core winding (40) is embodied as a simple, single-layer loop winding.

11. (Previously presented) A method for producing a magnetically excitable core (24) having a core winding (40) for an electrical machine, by which in a method step (S1), the core (24), having a substantially parallelepipiped shape (20) with slots (32) extending parallel on one side, is furnished, into whose slots (32), in a method step (S2), the core winding (40) is inserted by winding sides (36), and then in a method step (S3), the core (24) together with the core winding (40) is reshaped into a cylindrical ring shape with radially inward-oriented slots (32), wherein in each case all the winding sides (36) that are inserted into each slot (32) are pressed into a slot shape (119) in a tool (44) and reshaped before being inserted into the slot (32), characterized in that the winding overhang (115) is inserted into the at least one slot (32) before a conclusion of a bending of the core (24) into the cylindrical ring shape (52).

Claims 12-19 cancelled.

20. (Withdrawn) A method for producing a magnetically excitable core (24) having a core winding (40) for an electrical machine, by which in a method step (S1), the core (24), having a substantially parallelepipiped shape (20) with slots (32) extending parallel on one side, is furnished, into whose slots (32), in a method step (S2), the core winding (40) is inserted by its winding sides (36), and then in a method step (S3), the core (24) together with the core winding (40) is reshaped into a cylindrical ring shape (52) with radially inward-oriented slots (32), characterized in that the core winding (40) is wound with at least one winding overhang (15), and at least one winding overhang (115) has an overhanging winding side (36), which before an insertion of the winding in the slots (32) is lifted from a plane formed by non-overhanging winding sides (36).

Claim 21 cancelled.

22. (currently amended) A method for producing a magnetically excitable core (24) having a core winding (40) for an electrical machine, with each core winding (40) having core winding sides

(36), and each core winding side (36) having a cross section, by which in a method step (S1), the core (24), having a substantially parallelepipid shape (20) with slots (32) extending parallel on one side, is furnished, into whose slots (32), in a method step (S2), the core winding (40) is inserted by its winding sides (36), and then in a method step (S3), the core (24) together with the core winding (40) is reshaped into a cylindrical ring shape with radially inward-oriented slots (32), characterized in that in each case the cross sections of all the winding sides (36) that are inserted into each slot (32) are pressed into a slot shape (119) in a tool (44), which corresponds to a cross-sectional shape of the slots (32) of the core (24) and plastically reshaped before being inserted into the slot (32) to permanently assume the slot shape (119).

REMARKS

The last Office Action has been carefully considered.

It is noted that claims 1, 3, 21 and 22 are rejected under 35 U.S.C. 103(a) over the patent to Adachi.

Claim 2 is rejected under 35 U.S.C. 103(a) in view of the patent to Adachi in view of the patent to Rich.

At the same time the Examiner indicated that claims 4-9 and 11 are allowed.

The Examiner's indication of the allowance of claims 4-9 and 11 has been gratefully acknowledged. In connection with this indication, these claims have been retained as they were.

After carefully considering the Examiner's grounds for the rejection of the claims over the art, applicants canceled claim 3, and amended claims 1 and 22 to more clearly define the present invention and to distinguish it from the prior art.

It is respectfully submitted that the new features of the present invention as defined in the corresponding claims are not disclosed in the references applied against the original claims.

Turning now to the new features defined in claim 1, it is respectfully submitted that Adachi shows "a method for producing a magnetically core 51 having a core winding (stator oil assembly 52) for an electrical machine (alternating current generator for automobiles), by which in a method step, the core 51, having a substantially parallelepipiped shape (laminated assembly 50, figure 3) with slots 51a extending parallel on one side (figure 2), is furnished, into whose slots 51a, in a method step, the core winding (stator coil assembly 52) is inserted by winding sides (no specific number), and then in a method step, the core together with the core winding (stator coil assembly 52) is reshaped into a cylindrical ring shape with radially inward-oriented slots (see figure 1)".

Adachi does not show the feature whereby in each case all the winding sides that are inserted into each slot 51a are pressed together into a slot shape in a tool and together plastically reshaped before being inserted into the slot 51a to permanently assume the slot shape.

The only literal disclosures to the windings of "bent laminated cores" are shown in

A) col 2, line 7:

"disposing a stator coil assembly in the slot",

B) col. 2, line 45:

"stator coil assembly 52 disposed in the slots 51a",

C) col 2, line 57-63:

"On the other hand, the stator coil assembly 52 is performed into a shape which is generally flat and which needs not be further formed within the slots 51a of FIG.2, and thereafter inserted into the slots 51a as shown in FIG. 3. In other words, the stator coil assembly 52 is performed before it is inserted into the slots 51a so as to be ready for the insertion."

D) col. 3, lines 2-6:

"...the stator coil assembly 52 is to be inserted into the slots 51a, the stator coil assembly 52 is required to be moved only in one direction relative to the straight stator core 51, so that the stator coil assembly 52 is easily disposed in the slot 51a at a higher density."

E) Claim 1 (B) see A) above,

F) Claim 2 (d): "...performing said generally flat shaped stator coil assembly to be ready for insertion into said slots of said laminated core assembly..."

G) claim 4 (b): "...disposing generally flat shaped electrical windings in said slots; ...".

No one of these disclosures describes winding sides of a core winding to be pressed together into a slot shape in a tool and together plastically reshaped before being inserted into the slot 32 to permanently assume the slot shape 119.

Adachi also does not show the new features of claim 1 whereby the winding sides 36 of the core winding 40 are pressed into the slot shape 119, which corresponds to a cross-sectional shape of the slots 32 of the core 24.

Adachi only says that the stator coil assembly shall be disposed in the slot (see A), B), E), G) above). C) defines only a basic requirement that the coil assembly can be disposed into the flat stator 51. Also D) describes a way to put in the stator coil assembly 52 into the slots 51a. F) gives only hints to perform said generally flat shaped stator coil assembly to be ready for insertion into said slots of said laminated core assembly. This only gives a hint how to get the winding easily into the slots without any further work on the stator coil assembly.

There is definitely no hint in any one of the above mentioned features A) to G) to press the winding sides 36 of the core winding 40 into the slot shape 119, which "corresponds" to a cross-sectional shape of the slots 32 of the core 24.

Adachi does not describe that the winding sides of the core winding are pressed into a slot shape that is the same as a cross-sectional shape of the slots of the core. Adachi also does not describe that the winding sides of the core winding are pressed into a slot shape that is shaped alike a cross-sectional shape of the slots of the core.

Referring to the last paragraph of point 4 of the claims rejections reading this paragraph makes clear that strictly speaking the Examiner does not reject former claim 3 as there is no hint that the underlined feature would be obvious. The features of claim 3 are now incorporated into claim 1.

From the above presented arguments, it is believed to be clear that the patent to Adachi does not disclose the new features of the present invention as now defined in the amended claim 1, and does not contain any hint or suggestion that such features can be or should be provided in the reference. In order to arrive at the applicant's invention

from this reference in the sense of 35 U.S.C. 103, the reference has to be fundamentally modified by including into it the features which were first proposed by the applicants. However, it is known that in order to arrive at a claimed invention, by modifying the references the cited art must itself contain a suggestion for such modification.

This principle has be consistently upheld by the U.S. Court of Customs and Patent Appeals, which for example, held in its decision in re Randol and Redford (165 USPQ 586) that

> Prior patents are references only for what they clearly disclose or suggest, it is not a proper use of a patent as a reference to modify its structure to one which prior art references do not suggest.

It is therefore believed that the Examiner's rejection of original claim 1 over the patent to Adachi under 35 U.S.C. 103 should be considered as not tenable with respect to the amended claim 1 and should be withdrawn.

Turning now to claim 22, it is respectfully submitted that the differences between new claim 1 and new claim 22 are the additional features of claim 22 "...with each core winding (40) having core winding sides (36), and each core winding side (36) having a cross section, ..."

(line 3 and 4 of claim 22) and the inexistent feature "together" (line 12, twice).

The arguments presented with respect to new claim 1 are applicable to the features of claim 22 as well.

No one of these disclosures A) to G) describes winding sides of a core winding to be pressed into a slot shape in a tool and plastically reshaped before being inserted into the slot 32 to permanently assume the slot shape 119.

Adachi does not show the feature whereby in each case all the winding sides that are inserted into each slot 51a are pressed into a slot shape in a tool and plastically reshaped before being inserted into the slot 51a to permanently assume the slot shape.

As for the dependent claims, these claims depend on claim 1, they share its presumably allowable features, and therefore it is respectfully submitted that they should be allowed as well.

Reconsideration and allowance of the present application is most respectfully requested.

Should the Examiner require or consider it advisable that the specification, claims and/or drawings be further amended or corrected in formal respects in order to place this case in condition for final allowance, then it is respectfully requested that such amendments or corrections be carried out by Examiner's Amendment, and the case be passed to issue. Alternatively, should the Examiner feel that a personal discussion might be helpful in advancing this case to allowance; he is invited to telephone the undersigned (at 631-549-4700).

Respectfully submitted,

Michael J. Striker
Attorney for Applicants
Reg. No. 27233